

REMARKS

Claims 1-14 and 23-31 stand withdrawn from further consideration pursuant to 37 CFR § 1.142(b). Claims 15, 17, and 22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 15-18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,184,012 to Fujishima et al. Claim 22 stands rejected under 35 U.S.C. § 103(a) for obviousness over the Fujishima et al. patent and in further view of U.S. Patent Nos. 3,380,209 to Cheskin or 4,321,776 to Delight. Further claim 22 stands rejected under 35 U.S.C. § 103(a) for obviousness over the Fujishima et al. patent in further view of U.S. Patent No. 4,441,289 to Ikuno.

In response, all of the pending claims have been cancelled and new claims 32-55 have been added. In view of these amendments and the following remarks, it is believed that these claims are patentable over the prior art of record.

Claims 32-55 are directed to building panels. These panels are typically used in multi-story buildings and incorporate brackets and cross members.

Claim 32 is a structural panel that is similar to claim 15 having the structural limitations of the bracket as set forth in claims 1 and 4. Specifically, the structural panel includes a first track and a second track, a plurality of elongated members therebetween connected to and secured in the first track to the second track wherein the intersection of the outer most elongated members and the first track and the second track defined four corners; at least a pair of brackets and a cross member secured to the brackets. The brackets are secured to diametrically opposed inner corners of the panel. Each of the brackets includes a polygonal body with a first side and a second side defining a thickness with a cavity extending therethrough to further define a cavity wall. A first end and a second end adjacent the first end are provided. The first end and the second end each have mutually perpendicular outer surfaces. An imaginary first penetration line extends away from both the first and second ends and wherein the first penetration line intersects and passes through the cavity. A first passageway extends about the first penetration line through the cavity wall. A second imaginary penetration line extends from and in a direction perpendicular to the outer surface of the first end, wherein a second passage extends about the second penetration line through

the cavity wall of the first end, and wherein the cavity wall surrounding the passageway has a convex shape.

None of the prior art of record, either individually or in combination, teaches a structural panel including the claimed brackets. Specifically, none of the prior art of record teaches or suggests a bracket having a cavity wall with a convex shape. The Fujishima patent neither teaches nor suggests the claimed structural bracket having the polygonal-shaped body where a portion of the cavity wall is convex shaped. The Soviet Reference SU804798 neither teaches nor suggests a polygonal bracket having a wall that defines a cavity with a portion of the cavity wall having a convex shape. Therefore, it is believed that claim 32 is patentable over the prior art of record.

A purpose of the convex-shaped portion is so that when the cross member(s) is tightened, the cross member, through either a nut or washer for example, contacts essentially a circle without causing undue stress to both the cross member and bracket when the cross member is placed in tension, undue stresses could occur if the contacting surface is flat and the cross member is bent when it is placed in tension. Such flat contacting surfaces are shown in the cited prior art of record.

Claims 33-50 depend either directly or indirectly from claim 32 and are believed to be patentable for at least the same reasons that claim 32 is patentable over the prior art of record. Further, it is believed that new claim 32 overcomes the 35 U.S.C. § 112 deficiencies of original claims 15, 17, and 22.

Therefore, for the reasons set forth above, it is believed that claims 32-50 are patentable over the prior art of record.

New claim 51 is similar to claim 32 but requires four brackets, one bracket secured to a respective corner of the panel. The four brackets define two pairs of diagonally-spaced brackets. Each of the brackets defines a cavity. Two cross members are provided, wherein each cross member has two end portions, the end portions of each of the cross members received in a respective one of the bracket cavities. Each of the cross members is secured to a respective bracket of the pair of brackets, wherein each of the cross member end portions coact with a respective bracket of the pair of brackets through a convex-shaped surface. Claims 52 through 55 depend from claim 51 and specifically identify the convex surface, which may be a separate element or integrally formed in the bracket such as that

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shown in Figs. 5, 6, and 9. Although claims 52-54 relate to non-elected species, it is believed that claim 51 is patentable over the prior art of record for the reasons set forth below.

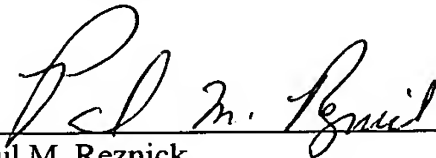
Like claim 32, claim 51 is directed to a structural panel. Each structural panel includes two pairs of brackets that coact with respective cross members through a convex surface, be it integrally formed in the bracket or through a separate element. This arrangement is neither taught nor suggested in the prior art of record. Hence, claim 51 is patentable over the prior art of record. Since claims 52-55 depend from claim 51, they too are believed patentable over the prior art of record.

CONCLUSION

Hence, in view of the foregoing, it is believed that (new) pending claims 32-55 are patentable over the prior art of record. Reconsideration of the rejections is respectfully requested.

Respectfully submitted,

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